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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/725,438 | 11/29/2000 | Arnab Das | 2-8-55 | 9499 |

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EXAMINER

LOGSDON, JOSEPH B

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/725,438 | DAS ET AL. |
| | Examiner | Art Unit |
| | Joe Logsdon | 2662 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

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IDS:

1. The IDS submitted 18 January 2002 has been considered. The IDS indicates "sheet 1 of 2, but there is only one sheet present in the file.

Drawings:

2. The formal drawings submitted 13 May 2002 are unacceptable because they have been destroyed by the radiation process. New drawings must be submitted.

Objections:

3. The disclosure is objected to because of the following informalities:

Page 1 of the specification lists an application, but fails to state the serial number.

The serial number or patent number, if the application is now a patent, must be specified.

Appropriate correction is required.

Claim Rejections—35 U.S.C. 102(b):

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, 5, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Reed et al.

With regard to claim 1, Reed et al. teaches a method of transmitting data comprising the steps of determining a first data rate based on a measured first channel condition at a receiver to which data transmission is intended (column 2, lines 40-51); performing a first data transmission at the first data rate (column 2, lines 40-51); determining a second data rate based on a measured second channel condition at the receiver if the first data transmission was not successfully received by the receiver (column 2, lines 40-51; column 4, line 47 to column 5, line 10); and performing a second data transmission at the second data rate, wherein the second data transmission is a re-transmission of the first data transmission (column 2, lines 40-51; column 4, line 47 to column 5, line 10).

With regard to claim 2, Reed et al. teaches the first and second data transmissions are identical (column 2, lines 40-51; column 4, line 47 to column 5, line 10).

With regard to claim 4, Reed et al. teaches the additional step of receiving, prior to the step of determining the first data rate, a rate indication message indicating the first data rate for the receiver (column 2, lines 40-51; column 4, line 47 to column 5, line 10).

With regard to claim 5, Reed et al. teaches the additional step of receiving, after the step of determining the first data rate and prior to the step of determining the second data rate, a rate

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indication message indicating the second data rate for the receiver (column 2, lines 40-51; column 4, line 47 to column 5, line 10).

With regard to claim 11, Reed et al. teaches the steps of receiving at a receiver a first data transmission at a first data rate, wherein the first data rate is determined using a measured first channel condition (column 2, lines 40-51); and transmitting a rate indication message indicating a measured second channel condition if the first data transmission was not successfully received at the receiver (column 2, lines 40-51; column 4, line 47 to column 5, line 10); and receiving a second data transmission at a second data rate, wherein the second data rate is determined using the measured second channel condition (column 2, lines 40-51; column 4, line 47 to column 5, line 10).

With regard to claim 12, Reed et al. teaches the additional step of storing the received first data transmission if the first data transmission was not successfully received at the receiver (column 5, lines 39-51).

Claim Rejections—35 U.S.C. 103(a):

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Wang et al.

: With regard to claim 3, Reed et al. fails to teach that the first data transmission may be soft combined with the second data transmission. Reed teaches, however, that the transmitted packet may be stored and combined with the retransmitted packet. (column 5, lines 39-51). Wang et al. teaches soft combining (abstract). It would have been obvious to one of ordinary skill in the art to modify the invention of Reed et al. so that it teaches soft combining, as in Wang et al., because such an arrangement would enable efficient reconstruction of the data packets.

8. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al.

With regard to claim 6, Read et al. fails to teach that the first data rate is a higher data rate than a data rate indicated in a received rate indication message. Reed teaches, however, that the baud rate is decreased on a poor channel (column 5, lines 4-7). It would have been obvious to one of ordinary skill in the art to modify the invention of Reed et al. so that the first data rate is a higher data rate than a data rate indicated in a received rate indication message because such an arrangement would help to maximize throughput.

With regard to claim 7, Reed et al. fails to teach that the second data rate is a higher data rate than a data rate indicated in a received rate indication message. Reed teaches, however, that the baud rate is increased on a good channel (column 5, lines 4-7). It would have been obvious to one of ordinary skill in the art to modify the invention of Reed et al. so that the second data rate is a higher data rate than a data rate indicated in a received rate indication message because such an arrangement would help to maximize throughput.

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With regard to claim 8, Reed et al. fails to teach the additional step of receiving, prior to the step of determining the first data rate, a plurality of rate indication messages indicating the data rates for a plurality of receivers. Reed does teach, however, a single rate indication message indicating the data rate for a single receiver (column 2, lines 40-51; column 4, line 47 to column 5, line 10). It would have been obvious to one of ordinary skill in the art to modify the invention of Reed et al. so that it teaches the additional step of receiving, prior to the step of determining the first data rate, a plurality of rate indication messages indicating the data rates for a plurality of receivers because such an arrangement would enable the system to function with multiple receivers.

With regard to claim 9, Reed et al. fails to teach the additional step of selecting a receiver from the plurality of receivers to which to transmit data using the received plurality of rate indication messages. It would have been obvious to one of ordinary skill in the art to modify the invention of Reed et al. so that it teaches the additional step of selecting a receiver from the plurality of receivers to which to transmit data using the received plurality of rate indication messages because such an arrangement would enable the system to function with multiple receivers.

With regard to claim 10, Reed et al. fails to teach that the selected receiver is a receiver associated with a rate indication message indicating a highest data rate. It would have been obvious to one of ordinary skill in the art to modify the teaching of Reed et al. so that it teaches that the selected receiver is a receiver associated with a rate indication message indicating a highest data rate because such an arrangement would enable the system to select the route that has the highest throughput.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ue et al., Marchetto et al., Kasahara, and Saito et al. are cited to show the state of the art.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Logsdon whose telephone number is (703) 305-2419. The examiner can normally be reached on Monday through Friday from 10:00 am to 6:30 pm.

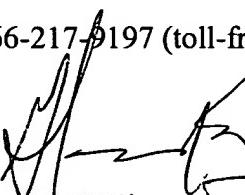
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joe Logsdon

Patent Examiner

Monday, March 08, 2004


HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
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